MEDICAL HISTORIES

AND

REFLECTIONS.

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REFLECTIONS.

VOLUME IV.

BY

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O! Herbs, roots, flowers, the power that in you lies, Could mortals but discern your properties.

Fletcher's Faithful Shepherdess.

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PREFACE.

IT may be expected, by some readers, that I should account for the small size of the volume, which I now offer to their notice. The collection of cases which it contains, appeared to me to merit an early publication, without waiting for additional matter to swell the size of the book; utility therefore superseded the consideration of uniformity. It would have been easy to have extended the volume, by giving more diffuse narratives of the symptoms and progress of the diseases, but to this practice I feel a great repugnance: it leads to a waste of the reader's

reader's time and attention, and is in direct opposition to the nervous brevity of the best models for medical writings. I have endeavoured, on the contrary, to compress the details of cases as much as possible, that the reader may be in full possession of the result, without loading his memory with adventitious circumstances.

A principal object in this publication has been to ascertain the existence of a more certain hydragogue, than any which the faculty have hitherto been accustomed to employ. This, after many years of research, I have accomplished, in a combination with the Extract of Elaterium; a preparation formed, according to Pliny's expression, "ad magnos mortalium usus;"

^{*} Histor, Natural. Lib. xx. Cap. i.

though he was not acquainted with its power in dropsical complaints. Fresh proofs of the efficacy of this combination are rapidly accumulating on my hands, but I did not think myself authorized to delay the communication longer, as many persons are probably suffering at this moment, who might be relieved by its employment.

Another inducement to an early, perhaps hasty publication, was the unusual number of diabetic cases, which fell under my observation, within the last two years. The success which attended my practice in many instances of this disease, and the relief which it generally afforded, seemed to require publicity, during the fluctuating impressions produced by various treatises on this important subject.

I can

I can only claim the fortuitous merit of offering a larger body of evidence, distinctly stated, than any writer who has lately addressed the public, respecting the disease.

For the attempt to form a more accurate idea of the formation of saccharine matter, in Diabetes, I must bespeak the reader's indulgence. In this part of my observations, I have ventured on the dangerous ground of hypothesis, but I hope not beyond its land-marks.

The case of scirrhus in the pylorus, which at present closes the volume, affords a clear view of the symptoms, in an unmixed instance of that unhappy complaint.

OBSERVATIONS

ON THE

TREATMENT OF DROPSY.

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HAVING been induced, by the failure of other hydragogues, in a case of general dropsy, to revive the use of the extract of Elaterium, I think it incumbent on me to offer to the public an account of my experience of the effects of that remedy.

It must appear somewhat extraordinary, that a medicine which was frequently used as a purgative, by HIPPOCRATES, and which is recommended

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strongly, in dropsy, by SYDENHAM and HOFFMAN, should have been neglected for many years, in general practice. This circumstance can only be accounted for, by supposing that its very active powers had been experienced with noxious effect, in consequence of its being administered in too large doses.* From an error of this kind, arose the long doubts respecting the action of antimony. We learn, from GUY PATIN's letters, that the dose of antimonial wine, commonly given in fevers, in his time, was three ounces. The bolder practitioners gave this quantity undivided, and must frequently, of course, have destroyed their patients. More cautious men exhibited only a third of this dose, and took their chance of its proving either emetic or purgative. The same

^{*} We may guess at the opinion of physicians on the continent, from Hoffman's short account of medicines. "Solenander scribit, Elaterium esse in Catalogo diaboli, quo necat homines, &c." De Materia Medica, C. 6. Hoffman himself knew better.

author informs us, that Louis XIV, in the early part of his reign, had nearly perished, from the effects of the first divided portion, thus given, which produced about twenty-two stools.

The extract of Elaterium is, indeed, on its first exhibition to a patient, nearly as active, and as dangerous, if incautiously given, as arsenic. But its powers in removing serous accumulations, in the cavities of the human body, surpass those of any other medicine; and the astonishing relief which it affords, in the dyspnæa occasioned by hydrothorax or ascites, even in persons of the most advanced age, must place it in the first class of hydragogues.

I flatter myself, therefore, that I shall contribute something to the alleviation of human misery, by explaining in what manner I have been enabled to give this formidable power a proper direction, and to render its use at once safe and efficacious.

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The sensible effects of Elaterium are. severe and constant nausea, frequent watery stools, and, in considerable doses, vomiting. It does not uniformly increase the urine; and for this reason, it is generally proper to combine it with more certain diuretics. After continuing the use of the medicine for some days, the patient will sometimes bear a considerable increase of the dose. I have gone to the extent of five or six grains a-day, in this manner, without producing any inconvenience. But it is always prudent to begin with the lowest dose, which is the sixteenth part of a grain of the extract.

CASE I.

The first case in which I had recourse to the Elaterium, (excepting some occasional combinations of it with other hydragogues,) was that of a gentleman rather advanced in life, who was attended by Mr. Thorpe of this place and myself, in 1809.

When

When I first saw him, he laboured under severe symptoms of hydrothorax; the Orthopnæa was particularly distressing during the night; his pulse was irregular, his urine scanty, and an accumulation of fluid was evidently taking place, both in the cavity of the abdomen, and in the cellular membrane.

After trying all the usual methods of promoting absorption, the distention of the abdomen became so great, and the patient's respiration was so much affected, that the operation of tapping was proposed, and was agreed to by the family. Previously to employing this resource, however, I thought it right to try the effect of the elaterium; and being then little accustomed to prescribe it, I directed it in the dose of half a grain, every morning. It produced a succession of watery stools, great relief in respiration, and the urine was increased to the quantity of two quarts in twenty-four hours.

With this happy change of circumstances, tapping was no longer thought of; we pursued our course, cautiously, with the Elaterium, and had the pleasure of seeing the swellings disappear, and of restoring the patient to comfortable sound sleep, and a good appetite.

In the course of a few weeks, he was completely emptied, and was enabled to use exercise in the air. But, having exposed himself imprudently out of doors, in a stormy, inclement day, he brought on a pneumonic affection, and a return of serous effusion, which carried him off.

CASE II.

About the same time, I was desired to visit a lady, upwards of 80, who was a patient of Mr. Cunliffe of Bury. She laboured under general dropsy; and the accumulation in the thorax was so distressing, that during six weeks before I

saw her, she had been unable to lie down in bed, and could only sleep for a few minutes together, as she sat in her chair. Very active hydragogues having been employed, I advised a trial of the elaterium, which produced almost immediate relief. This patient also took the medicine in the dose of half a grain. She suffered little inconvenience from its effect on her bowels; it produced watery stools, an increased flow of urine, and a diminution of the swellings. She was now able to lie down in bed, and to sleep soundly, and she recovered so far, as to pay visits to her friends at short distances.

CASE III.

Another elderly lady, who was affected with hydrothorax and anasarca, took the extract of Elaterium, not long after, in smaller doses, as it occasioned great nausea. Though she was much harassed by the watery stools, she yet

felt so much relief in her respiration, that she persevered in taking the medicine, till she had attained a state of comparative ease. Her constitution was too much worn out to admit more than palliative practice.

CASE IV.

I was called to Mr. K. a person between 60 and 70, in February 1812. He was affected with general dropsy; with great difficulty of breathing; and the anasarca was rapidly increasing. I put him on the use of the extract of Elaterium, with diuretics. The first morning-dose produced five or six watery stools, which exhausted him considerably, but gave him much relief in his respiration. Finding that the effects of the remedy were so severe, I reduced the dose to a very minute quantity, which is readily done, by dissolving a grain of the extract in a four-ounce mixture, and exhibiting only a few drops

drops for a dose. Upon this plan, his swellings, and the affection of the chest were completely removed, in the course of a fortnight.

CASE V.

Mr. B. about 50 years of age, was liable to severe attacks, resembling the paroxysms of spasmodic asthma, which repeatedly placed him in situations of great danger. About half a year ago, he called upon me, in great distress, owing to a dry cough, with orthopnæa, and evident marks of hydrothorax. His urine was now scanty. I directed the Elaterium for him, in the usual manner, and in the course of a few days relieved him from his symptoms, by the evacuation of watery stools. He exposed himself to cold, soon after, and brought on a relapse; and his stomach became so extremely irritable to the stimulus of Elaterium, that I was under the necessity of changing his medicine. I then ordered him a solution of gamboge, which he took in the proportion of half a grain in each dose. This remedy has had the desired effect of clearing his respiration, and he is now in very good health.

* This statement was written in summer, 1812. In December last, Mr. B. was attacked with symptoms of Ascites and Anasarca, and with indications of a fresh collection of water in the chest. He was again completely emptied by a combination of Elaterium, Melampodium, Gamboge, Calomel and Squills, and was able to attend to his business as usual.

A determination to the brain subsequently took place, and I was called to him just in time to witness his dissolution by an apoplectic stroke.

CASE VI.

Mrs. H. aged about 35, came to me, with well-marked symptoms of hydrothorax. She had the orthopnæa, dry

cough, scantiness of urine, and numbness of the arm, and was seldom able to lie down in bed. Symptoms of general anasarca were likewise coming on. I directed the Elaterium, with diuretics, and in the course of about three months, she was completely restored to health.

CASE VII.

Mr. B. a gentleman-farmer, about 60 years of age, had symptoms of ascites and hydrothorax, and parted with little urine. I ordered him the Elaterium with diuretics. He received much relief from the watery stools, and appeared to be recovering; but he had not patience to persevere steadily in using his medicines. A few weeks ago, I heard from him again. The legs had now become anasarcous, and a rupture of the skin, and discharge of serum from the orifice, had taken place. The integuments of the penis and scrotum were also much distended. He expressed

pressed great dislike to the mixture which contained the Elaterium, and begged that some other medicine might be tried. I therefore had recourse to the combination recommended by Hippocrates, of Elaterium with black Hellebore, joined with small quantities of calomel and squills, formed into pills. The effect of this combination he described in a letter to me. Two pills, containing abour one-eighth of a grain of Elaterium, and a grain and half of black Hellebore, produced about two quarts of fluid, by stool; gave him great relief; but left him very low. In this case I despair of ultimate success.

CASE VIII.

Mr. A. a farmer, about 66 years of age, was seized with symptoms of dropsy, after exposure to the weather, on a very stormy winter-night. When I saw him, he had Orthopnæa, dry cough, was unable to lie down in bed, and his

urine was very scanty. He had also anasarcous swellings of the legs, and water was collecting in the abdomen.

I ordered the Elaterium in the usual way, and it operated very gently, giving him watery stools, relieving his breathing, and removing the swellings of his legs. In the course of a month, he was so far recovered, that I discontinued my attendance. He brought on a relapse, soon after, by exposing himself to the weather, on a cold day in spring, and I found him again distressed with Orthopnæa, and the symptoms of Ascites renewed. He could no longer bear the elaterium, in the usual form, and gamboge was tried, without effect. I then directed the combination of black Hellebore, Calomel and Squills, with a very minute portion of Elaterium; and from this remedy he had watery stools, an increase of urine, and relief from all his uneasy symptoms; his urine was also encreased to three quarts in twenty-four hours. The

The small quantity of Calomel which was contained in the pills, produced an unexpected ptyalism in this case. The urine decreased, of course, but the swellings of the legs were removed, and that of the abdomen was very much diminished. When the ptyalism began to abate, the effusion in the peritoneum was found to be nearly gone; the pulse became free and open; and the urine increased again in quantity. He is now completely emptied of water, and has recovered his appetite and spirits. This patient, I understand, afterwards relapsed, and died. I did not see him in his last illness.

CASE. IX. . . sew anad

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Mr. W. C. had brought on a general tendency to dropsy, by the abuse of spirituous liquors, though he was not much more than 50. He suffered from Orthopnæa, and swelling of the abdomen. He took small doses of Elaterium, in conjunction

conjunction with some of the bitter extracts, and was, for some time, entirely relieved from his complaints. Want of steadiness in using his medicine, and a recurrence to indulgence in the use of spirits, occasioned a relapse, which proved fatal.

CASE X.

Joseph Lees was admitted at the Infirmary, April 8th, 1811, with symptoms of general dropsy; he took the extract of Elaterium, with diuretics, and in ten days was discharged cured.

CASE XI.

Mary Prescott was admitted, Nov. 4th, 1811, with symptoms of ascites and anasarca. She was directed to take the extract of Elaterium, in a diuretic mixture, and was discharged cured, in the beginning of December.

CASE XII.

James Birch was admitted, Dec. 16th, 1811, with ascites and anasarca. He took the extract of Elaterium, in a diuretic mixture. and went out, much relieved, on the 9th of January, 1812.

CASE XIII.

James Barnes was admitted, Jan. 1st, 1812, with anasarca, and incipient ascites. He took Elaterium with diuretics, and was discharged cured, on the 11th of the same month.

CASE XIV.

John Marsh of Shude Hill, Manchester, was admitted an home-patient, June 1st, 1812. He was affected with symptoms of hydrothorax, ascites, and anasarca. He was ordered to take the extract of Elaterium with diuretics; and in a few days was completely relieved from his swellings and Orthopnæa, and was enabled to attend to his business.

CASE XV.

Ann Calvert, who has occasionally been a patient of the Infirmary, for ascites and hydrothorax, ever since Dec. 1794, and who has been relieved by frequent repetitions of the operation of tapping, was admitted, with her usual symptoms, in Feb. 1811. Though I could expect nothing farther than the palliation of a disease of seventeen years' standing, I thought it right to try the effect of Elaterium. It did not succeed. Indeed it produced such extreme nausea, in the smallest doses, that I have reason to doubt whether she gave it a fair trial. It has been necessary to recur to the operation, twice, in this case.

CASE XVI.

George Worthington was admitted, in July, 1810, with symptoms of general C 2 dropsy. dropsy. He took a quarter of a grain of extract of Elaterium thrice a-day, and two drachms of Crystals of Tartar every morning. He was discharged cured, in the beginning of August.

CASE XVII.

Jane Pryme, was admitted, Sep. 3rd, 1811, with symptoms of general dropsy. She was ordered half an ounce of the Crystals of Tartar, every morning; and a diuretic mixture of four ounces, in which two grains of extract of Elaterium were dissolved. The dose was a tea spoonful four times a-day. Another grain of the extract was added to the mixture, in the course of a few days. She was discharged cured, on the 27th of the same month.

CASE XVIII.

Eliz. Bickley was admitted, Dec. 3rd, 1810, with symptoms of general dropsy.

She took the extract of Elaterium, dissolved in a diuretic mixture, without any material benefit.

CASE XIX.

Mrs. B. a lady upwards of 60, had been threatened, for about five years, with a dropsical attack. When I saw her, she laboured under Orthopnæa, and anasarca, which affected even the backs of her hands, and ascites; her cheeks were also swelled; her urine was scanty; and general dropsy was rapidly encreasing. She had received occasional relief, from purging doses of jallap, but when she was obliged to desist from this plan, by debility, her symptoms always recurred, and with increasing violence.

I put her on a course of extract of Elaterium, dissolved in a diuretic mixture, which in a few days relieved the Orthopnæa; and by perseverance, reduced the swellings of the belly and C 3 limbs.

limbs, and restored her urine to a natural quantity. She left this place for her usual residence, in about a month, completely restored to health. The formula, which I have commonly employed, in cases of this kind, is the following:

R Extract. Elaterii gr. j.

Sp. Æther. Nitros. unc. ij.

Tinet. Scill.

Oxymell. Colchic. sing. unc. ss.

Syrup. Rhamni unc. j.—m.

ft. Solutio.—Capt. drach. j. ex aquæ panxillo, ter,
quater-ye in die.

CASE XX.

Ann Owen, of Owen's Court, was admitted a home-patient, Feb. 1811. She had Ascites, Anasarca and Hydrothorax; and suffered extremely from Orthopnæa. I put her on a course of Elaterium, with diuretics, which afforded her relief in a few days; and she was discharged cured, in the end of February.

After having paid particular attention to the management of dropsical cases, during the last twenty-two years, I feel the observations of Aretæus on the disease, in their full strength: διαδιδρήσιωσι γαρ΄ τόλε πάγχυ παίρω δτ' είνυχίης, καὶ θεῶν μάλλου, ἡ τίχνης τὰ γαρ μέζουα πάντα ιῶνται μῶνοι Θεοί.* The chapter of this discriminating author, on the cure of dropsy, is unfortunately lost, and we are unable to ascertain what remedies he had tried for that purpose. It is probable that black Hellebore was among the number, because Hippocrates mentions it as an useful hydragogue, in anasarca, at least.

But however discouraging our views must be, respecting the eventual termination of dropsy, in all cases where the effusion depends on diseases of the viscera, it is consolatory to have ascertained the efficacy of a remedy, like Elaterium, which seems to possess a complete power of removing simple effusion, where no

> * Пері Тбротоς. С. 4

organic disorder exists, and of at least alleviating the agonies arising from hydrothorax and ascites, even in the advanced stages of an incurable disease.

The cases which I have given, are not the whole of those in which I have used this remedy; but they exhibit an impartial view of its success. The only additional instances of its exhibition, of which I preserve imperfect recollection, were most favourable to its efficacy.*

I am aware of the readiness with which practitioners are induced to exaggerate the powers of a remedy, which has fulfilled their views, in situations of peculiar anxiety and interest; but I confess that the nearly uniform result which I have experienced, from the exhibition of Elaterium, in hospital, as well as in private practice, has impressed me with

^{*} Several fresh instances of success, with this combination, have occurred to me since these observations were written.

the highest opinion of its virtues. During the last three years, I have made it the leading ingredient in my practice, in this disorder; and though I have deemed it proper, for the benefit of my patients, to join active diuretics with it, yet I am persuaded, that they would have proved inadequate to the favourable results of the cases, without the aid of this excellent hydragogue.

Indeed I have been convinced, for several years, that modern practice has been much injured, by an affectation of simplicity in prescription, in defiance of the experience of past ages; which has degenerated in some instances, into inertness of composition, and in others, into a thoughtless repetition of a few medicines, applied without discrimination, in most cases. To prescribe, as Crashaw expresses it, "Certain hard words, made into pills," is a wretched prostitution of a noble art. But this is very different from the powerful combinations which are to

be found in the works of the older medical writers. The farrago, which was the standing jest of medical men, not many years ago, must contain unsuspected powers; or it would not have been employed by such physicians as SYDENHAM, WILLIS, or HOFFMAN. This appears to me a subject of great interest and curiosity, deserving the investigation of intelligent observers. I have found the combination of many liquid diuretics eminently useful; and I have been pursuing, for some years past, inquiries into the effect of a farrago of narcotics, from which I flatter myself that beneficial consequences have resulted, a view of which I may hereafter communicate to the public.

It may appear to some persons a fanciful idea, but I have been led by my observations to suspect, that there exists, in the relative effects of medicines, something similar to the harmony of colours and sounds; and that the impulse requisite to the living powers of the body, which cannot be produced by a single impression, may be effected by a concurrence or succession of impressions, in some measure dependant on each other.

It appears, from some of the cases which I have mentioned, that even Elaterium suffers a diminution of its power, from repeated exhibition. In this event, the action of the kidnies may be again excited, by combining it with black Hellebore or Gamboge, and by giving the Syrupus Rhamni, with Oxymel of Colchicum, and a liquid preparation of Squill, at proper intervals.

From my experience of the action of Elaterium, it appears to be particularly exerted in stimulating the absorbent vessels. If this fact should be confirmed by farther trials, it would lead to an extension of its employment, in diseases for which at present we can scarcely be

said to possess any remedy. In all cases of præternatural changes in the growth and organization of parts; in the enlargement and induration of internal glands, in morbid accumulations of animal oil, and in the destructive process generated by hydatids, we might find some resource in this active stimulant. But this is advanced simply as a conjecture; for my experience does not, at present, warrant any hopes of so flattering a nature.

OF DIABETES.

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SINCE the publication of the second edition of my Medical Histories and Reflections, I have met with several new cases of Diabetes, a short view of which may be found useful, in settling our ideas respecting the cure of that uncommon and obstinate disease.

In delivering these facts, I shall confine myself to the essential points of each case, without entering into unnecessary details; being persuaded, that the parade of submitting every minute occurrence to the reader, is not only nugatory but prejudicial, as tending to mislead his attention from the real indications, and

to fix it on contingent circumstances, which are often quite unconnected with the natural history of the complaint.

CASE I.

Joseph Fletcher was admitted, July 1, 1811. He was emaciated, had a foul tongue, and uneasy sensations in the testicles. His urine did not exceed five pints in quantity, during twenty-four hours, but it was found, by experiment, to contain a considerable proportion of saccharine matter. He had been ill about ten months. He was ordered half a drachm of Cinchona, and half a drachm of Uva Ursi, with half a grain of Opium, to be taken with Lime-water, four times a-day. He was also directed to live entirely on animal food. On the 7th, his urine was reduced to four pints and a half, and on the 10th to three pints and a half. During this period, he was generally costive, and required frequent doses of Castor-oil. From the 11th of July

July to the 13th, he passed only three pints of water, in twenty-four hours. It was still found to contain an equal proportion of saccharine matter, though his general health was improving. From the 14th to the 25th of July, he only passed two pints and a half of urine, in twenty-four hours, and the proportion of saccharine matter was still undiminished. He was now made an outpatient, and I continued to receive accounts of him, for some weeks, when his urine having become brackish, and his health being restored, he was discharged cured.

In this very curious case, we have an example of Diabetes Mellitus, where the urine was scarcely in quantity greater than natural, at the commencement of the disease; and long before its conclusion was reduced much below the natural standard, without a diminution of the relative quantity of saccharine matter.

Yet the general debility and emaciation were as remarkable, as if he had been voiding urine in very great quantities. The analysis of the urine was made by Dr. W. Henry, so that no doubt of its accuracy could exist.

CASE . II.

Samuel Barnes was admitted, Sep. 30, 1811. He made six quarts of urine, in twenty-four hours, which contained a considerable quantity of saccharine matter. He was emaciated and weak, but his tongue was tolerably clean. He was put on a course of Cinchona with Uva Ursi and Opium, with Lime-water, and animal diet.

On the 3rd October, he only passed two quarts and one pint of urine, in twenty-four hours, but in November it again increased in quantity, as the subjoined table will shew. On the 13th December, his gums inflamed, and put on a scorbutic appearance; and in three days more, they became ulcerated.

On the 13th February, his gums were still sore. The urine was now reduced to four pints and a half, or five pints, in twenty-four hours, and was becoming brackish.

On the 24th February, his gums were healing. In the beginning of March, his urine was not more in quantity, than in his usual health; it was brackish, and as he appeared well in every respect, he was discharged cured.

		DRINK.	DIABETIC FLUID.		
1811.		Quarts.	Quarts.		
Nov.	1.	4	14.		
	2.	4	3, 1 pint and half		
	3.	3, 1 pint	3, I pint and half		
	4.	:4	4, 1 pint		
	5	3, I pint and half	2, 1 pint and half		
	6.	2, 1 pint	2, 1 pint		
	7.	3, 1 pint and half	3, 1 pint		
		T) 0			

		DRINK.	DIABETIC FLUID.
1811.		Quarts.	Quarts.
Nov.	8.	3	2, 1 pint and half
	9.	2, 1 pint and half	2, 1 pint and half
	10.	2, 1 pint and half	2, 1 pint
	11.	4	4
	12.	3, 1 pint	3, and half pint
	13.	3	3
	14.	3	2, 1 pint and half
	15.	3, and half pint	3
	16.	4	-3, 1 pint and half
	17.	3, 1 pint	3, 1 pint
	18.	4, and half pint	4, and half pint
	19.	3, and half pint	2, 1 pint
	20.	3, 1 pint	3, 1 pint and half
	21.	2, 1 pint	2, 1 pint and half
	22.	2, 1 pint and half	2, 1 pint
	23.	3, and half pint	2, 1 pint
	24.	3, 1 pint	3, and half pint
	25.	3, 1 pint	3, and half pint
	26.	4	3, and half pint
	27.	3, and half pint	2, and half pint
	28.	3. 1 pint and half	2, 1 pint and half
	29.	3, 1 pint and half	3
	30.	3, and half pint	2, and half pint
Dec.	1.	3, 1 pint and half	3
	2:	3, 1 pint	3, 1 pint
	3.	4, and half pint	.4
	4.	3, and half pint	3
	5.	4	3, and half pint
	6.	2, 1 pint and half	2, 1 pint
	7:	3, 1 pint	3
	8.	3	2, pint
			Dec. 9.

	DRINK.	D	HABETIC FLUID.	
1811.	Quarts.	Quarts 31		
Dec. 9. 3	, and half pint	3	- 8 utseil.	
10. 2	, I pint and half	2,	1 pint	
11. 2	, I pint and half	2,	1 pint and half	
12. 3	, I pint	1:3	JB 11	
13. 3	, I pint	. 3,	and half pint	
14. 3	, and half pint	3	4 11	
15. 3	, I pint	1 3,	and half pint	
16. 4	, and half pint	3,	1 pint	
17. 3	, and half pint	2,	1 pint	
18. 3	, I pint and half	2,	1 pint - 11	
19. 3	, I pint and half	. 3	.= -01	
20. 3	e of the Light	2,	1 pint.	
21. 3	and half pint	2,	1 pint and half	
22. 3	I pint	2,	I pint and half	
23. 3	1 pint	3 -	· 12	
24. 3	, and half pint	3		
	1 pint	13		
26. 3	I pint and half	3 :	1 111	
27. 3,	and half pint	2,	1 pint	
28. 3	1 pint	2,	1-pint and half	
29. 4,	and half pint		and half pint	
30. 4	A Hold for	3;	and half pint	
31. 3,	I pint and half	3		
1812.	. , \$			
Jan. 1. 3,	I pint	2,	1 pint and half	
2. 3,	1 pint and half	-3,	and half pint	
. 13. 4			and half pint	
4. 4	9 . 1	3		
5.11 3,	and half pint	3		
6. 4,	and half pint	3,	and half pint	
7. 4		3	1	
	D 3		Inn o	

		Drink,	DIABETIC FLUID.
1812.	Quarts	s.	Quarts.
Jan. 8	3, 1, 1	int and half	2, 1 pint and half
g	3, 1 p	int and half	3
10	3, 1 p	int and half	3
11	. 3, 1 p	int and half	2, 1 pint and half
. 12	. 3, 1 p	int	3
13	. 4		3
1.4	4. 3, 1 p	int	2, 1 pint and half
15	5. 3, 1 p	int	3
16	6. 3, 1 p	int and half	2, 1 pint and half
17	7. 3, 1 p	int and half	3, and half pint
18	3, 1 p	int and half	3, and half pint
19	- 1	int and half	3, and half pint
20	0. 4		3, and half pint
2	r	int and half	2. 1 pint and half
. 25	r		3, and half pint
2:		int and half	3
2	- 4	oint and half	3, and half pint
2.	, . [oint and half	3, and half pint
20			3, and half pint
2			3, 1 pint
- 2			3, and half pint
2	,1	oint and half	3, and half pint
30		0 = 0*	3
3			3, 1 pint
	1. 4		3, and half pint
		oint and half	3
	3. 4		3, and half pint
	4. 4		3, 1 pint
	5. 4		2, 1 pint and half
		d half pint	2, 1 pint and half
	7. 3		2, 1 pint
			Feb. 8.

		- LE . LE . LE	1 2.5 A
		DRINK.	DIABETIC FLUID.
1812	2.	Quarts.	Quarts.
Feb.	8.	3, and half pint	2, 1 pint
	9,	3	2, 1 pint
	10.	3	2, 1 pint
	11.	3	2, and half pint
	12.	3	2, I pint
	13.	3, and half pint	2, 1 pint
	14.	3	2, 1 pint
	15.	2, 1 pint	2, and half pint
	16.	3	2, 1 pint and half
	17.	3, and half pint	1. 3
	18.	3	2, and half pint
	19.	3, and half pint	2, and half pint
	20.	3 3241 148.	2, and half pint
	21.	3	2, and half pint
	22.	.3	2, and half pint
	23.	3, and half pint	2, 1 pint
	24.	3, and half pint	2, I pint
	25.	113.	2. I pint
-90-	26.	-3	2, 1 pint
rel:	27.	3, and half pint	2, 1 pint
	28.	3, and half pint	2, 1 pint and half
oni	29.	3-1	2, 1 pint and half
March	0 - 3	1 3 ELL 1 1 1. 1.	2, 1 pint and half
. 251.	2.	A direction	2, 1 pint and half
	3.		2, 1 pint - 70
	4.	3 .1003 000	2. 1 pint
	5.	2, 1 pint and half	
a	6.	3	2, 1 pint
	7.	3	2, 1 pint and half
	8.	2, 1 pint	2, 1 pint
	9.	. 3	2, 1 pint and half
		D 4	In

In this case, scurvy seemed to be artificially produced, by the patient's strict adherence to the exclusive use of animal food. The occurrence of this adscititious disease did not appear to influence the progress of the Diabetes, in any respect.

This patient afterwards relapsed, from inability to procure animal food.

CASE III.

Thomas Wainwright was admitted, November 4th, 1811. He made six quarts of water, in twenty-four hours, containing the usual proportion of saccharine matter. He was feeble, emaciated, and had a thick, dry crust on the tongue. He was put on the usual course Uva Ursi and Opium with Cinchona, Lime-water, and animal diet.

His bowels soon became so much disordered, by his confinement to animal food, that it was necessary to order him Astringents Astringents with Opiates, and to allow him a proportion of vegetable food.—Very little impression was made on the disease, by resuming the tonic plan and animal diet, as will be perceived by the table.

On the 6th February, his teeth became loose, and his gums were ulcerated.

Finding no material alteration in his symptoms, he was discharged as an outpatient, March 10th, 1812.

Quarts.

DRINK. DIABETIC FLUID.

Nov.	5.		=		, 0 .3
	6.		2		11.7, 4
	7.	3	1. 2	range ad f	4, 1 pint .8
	8.	3	0 .		4, and half pint
	₹ 9. 15	3 :	. 5	tani l'ad l	4, 1. pint .01
		3			4, 1 pint.11
	11. 00	3, 1	pint	5	4, 1 pint and half
15	12.	3 .			4, 1 pint and half
	13.	3, 1	pint	unity Tipe !	4, 1 pint and half
111	14.	3, 1	pint		4, 1 pint
	15.	3, 8	nd half	pint	4, and half pint
15	16.	3, 1	pint		4, 1 pint and half
					Nov. 17,

-1-2	47.2.0.2020	- #*				
	DRINK.	DIABETIC FLUID.				
1811.	Quarts.	Quarts.				
Nov. 17		4, and half pint				
1,8		4				
19		4, 1 pint and half				
20		4, I pint and half				
21		4, 1 pint				
22		4, and half pint				
23		4				
24		.4				
25		4, and half pint				
26		3, I pint and half				
27		4, and half pint				
28	the second secon	4, and half pint				
29		4, 1 pint				
-1 30	K	4. 1 pint and half				
Dec. 1	-50 4 G 1 133 U 2	4, I pint				
2		4, 1 pint				
- 3	- , F.	4, and half pint				
	3, and half pint,	4				
	5. 3, and half pint	.4 .1 F				
6		4				
	. 3, 1 pint	4				
	3, and half pint	4				
	2. 3, 1 pint	4				
10		3, 1 pint and half				
11	4	4				
	3	3, 1, pint				
	3, and half pint	3, 1 pint and half				
14		4				
15		4, and half pint				
16		3, 1 pint				
	2, 1 pint and half	3, and half pint				
-72 (0		Dec. 18.				

OF DIABETES.

		DRINK.	DIABETIC FLUID.
1811	l. '	Quarts.	Quarts.
Dec.	18.	3	3, 1 pint
	19.	3	3, 1 pint and half
	20.	3, and half pint	4
	21.	3, and half pint	3, 1 pint and half
	22.	3, 1 pint	4,
	23.	31 -	3, 1 pint
	24.	3	3, 1 pint and half
	25,	3	3, 1 pint
	26.	3, and half pint	4
	27.	2, 1 pint and half	3, and half pint
	28.	3	3, 1 pmt
	294	3	3, 1 pint
	30.	3, and half pint	3, 1 pint
	31.	3, and half pint	4
181	2.	-13	W 15 . 10
Jan.	1.	3, 1 pint	3, 1 pint and half
43+	2.	3	3, 1 pint
122)	3,	3	3, and half pint
	4.	3, and half pint	3, 1 pint and half
	5.	3, 1 pint	4
	6.	3, and half pint	3, 1 pint and half
1 20 %	7.	3 2	3, 1 pint and half
	8.	3	3, 1 pint
_ :	9.	3 :	3, 1 pint
-	10.	2, 1 pint and half	3, 1 pint
	11.	2, 1 pint and half	3, and half pint
	12.	2, 1 pint and half	3, and half pint
	13.	3	3, 1 pint
	14.	3, and half pint	3, 1 pint
	15.	3	3, and half pint
	16.	3 .	3, 1 pint and half
			Jan. 17.

		-
1010	Drink.	DIABETIC FLUID.
	Quarts.	Quarts.
Jan. 17.	-	3, 1 pint
	3, and half pint	3, 1 pint
19.	3	3, 1 pint
	3, and half pint	3, 1 pint
	3, and half pint	3, 1 pint and half
	3, and half pint	3, 1 pint
	3	3, 1 pint
	3 8	3, 1 pint and half
	2, 1 pint and half	
	3th and " - 1 - ' .	3, 1 pint
27.		3, 1 pint
	.31 ,8	S, 1 pint and half
	3, and half pint	
	3, and half pint	
	3, 1 pint	3, 1 pint and half
	3, and half pint	3, 1 pint and half
	3, 1 pint	3, 1 pint and half
	3, and half pint	3, I pint and half
4.	3, 1 pint	4
	3, and half pint	3, 1 pint and half
	3, and half pint	4
7	3, and half pint	3, 1 pint and half
8. 40	3, and half pint	4
9.,10		3, 1 pint
10		3, 1 pint
11	(3 11 m) [w	3, 1 pint and half
	3, and half pint	
	3, and half pint	3, 1 pint and half
	o, - F	4
15.	3, and half pint	3, 1 pint and half
16.	3, I pint	3, 1 pint and half
0.0		Feb. 17.

		DRINK.	DIABETIC FLUID.
1819	2.	Quarts.	Quarts.
Feb.	17.	3, 1 pint	3, 1 pint and half
	18.	3, and half pint	3, 1 pint and half
	19.	3, and half pint	3, 1 pint
	20.	3, and half pint	3, 1 pint
	21.	3	3, 1 pint
	22.	3, and half pint	3, 1 pint
	23.	3, 1 pint	3, 1 pint and half
	24.	3, 1 pint	3, 1 pint.
	25.	3, and half pint	3, 1 pint and half
	26.	3 -	3, and half pint
	27.	3	3, 1 pint
	28.	3, 1 pint	3, 1 pint and half
	29.	3, 1 pint	3, 1 pint and half
March	1.	3, and half pint	3, 1 pint and half
	2.	3, and half pint	3, 1 pint
	3.	3	3, 1 pint
	4.	3, and half pint	3, 1 pint and half
	5.	3, 1 pint	3, 1 pint
	6.	3	3, and half pint
	7.	3, and half pint	3, 1 pint
	8.	3, and half pint	3, and half pint
	9.	_ 3 ′ ·	3, 1 pint
		OUT-PATIE	NT.
	10.	3, and half pint	3, 1 pint
	11.	3	3, 1 pint
1	12.	3, and half pint	3, 1 pint and half
	13.		3, 1 pint and half
	14.	3, 1 pint	4 -
	15.	3, and half pint	. 4
	16.	3, 1 pint	4
	17.	3, 1 pint	4, and half pint
			March 18

	Drink.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
March 18.	3, 1 pint	4, and half pint
19.	3, and half pint	'4
20.	'3, '1 pint	4, and half pint
21.	'3, 1 pint	4, 1 pint
22.	'3, '1 pint and half	4, 1 pint and half
23.	3, I pint	4, 1 pint
24.	4 .	4, 1 pint and half
25.	3, 1 pint	4, 1 pint and half

In this case, also, scurvy was produced, by the continuance of animal diet, without any material alteration in the diabetic symptoms.

Wainwright became much worse, after his discharge from the Infirmary, being unable to procure a sufficient quantity of animal food, by his labour. He was therefore re-admitted in March, 1812; and a few drops of the arsenical liquor were added to each dose of his tonic medicine; but, though his health improved, as there was no prospect of any speedy change for the better, he was discharged relieved, April 16th.

CASE IV.

CASE IV.

Mr. A—n, an elderly man, came to consult me for a diabetic affection, under which he had laboured for some months. His urine varied in quantity, but was much above the natural standard. Half a pint of it yielded, by analysis, upwards of three drachms of saccharine matter. Though his appearance was fresh and strong, yet he had lost much flesh, in the course of the complaint.

He was put on the same plan of tonic medicines and diet, as the preceding patients; and ordered to drink limewater, and to abstain from all fermented liquors and vegetables.

About a month afterwards, I heard from his surgeon, that he was improved in all respects; that he did not pass more urine than equalled the quantity of liquids which he drank; that his urine was become brackish, and his general health was better. It was very difficult, however, to restrain him from indulging in a glass of mild ale.

My last account of this patient, dated August 21st, 1812, I shall insert in the words of his surgeon, Mr. Newbold of Macclesfield.

Macclesfield, August 21st, 1812.

" My dear Sir,

"I have not been inattentive (though "I have been tardy in replying to your "letter) to the object of your enquiry, "and have taken some pains to obtain "definite information from a patient, "who, conscious of daily transgressing the prescribed limits of regimen or medicine, is not over sincere in his details. I have much satisfaction in announcing to you, that though Mr. A. has for the last five or six weeks taken "no Cinchona or Uva Ursi, or indeed

" any medicine, and withal little or no "animal food, his urine does not in " quantity at all exceed the quantity of-" liquids taken, on the contrary it has, "in two repeated daily experiments, "been rather less; the quantity made "in twenty-four hours, during these "two days, was rather less than three " pints, something strong of ammonia " and high-coloured, and on analyzing "sixteen ounces of this urine, six "drachms of a very dark brown sedi-"ment, of the consistence of syrup, "was deposited, in which the Ammonia, "empyreumatized, so much predomi-" nated over the saccharine matter, that " little or no sweetness was perceptible " in it."

This patient is now perfectly recovered.

CASE V.

Miss P—n, a young lady, had been troubled for almost a year with dyspeptic Vol. IV. E symptoms,

symptoms, and pain in the stomach, for which she had consulted me. In Feb. 1812, she was suddenly attacked by Diabetes, (without any hysterical symptoms,) to the amount of six or seven quarts of urinary evacuation in twentyfour hours. Her surgeon consulted me for her, before I saw her in this state, and was advised by me to give the tonic medicines, lime-water, and animal diet. This had a temporary effect in stopping the disease; but it increased again, and I was then desired to visit her. I found her much debilitated; her legs öëdematous; her tongue divided by deep, ulcerated fissures, and her gums ulcerated. The quantity of urine was then nine pints, in twenty-four hours, and the taste was sweet.

I directed a few drops of the Liquor Arsenicalis to be given with each dose of the tonics; and as the soreness of the gums and tongue was very troublesome, I desired that she might take some sweet wort twice or thrice a-day. This, however, seemed to increase the diabetic affection, and was soon laid aside. The disease went on with great obstinacy, though the cedematous swellings of the legs were removed, though the fissures of the tongue healed, and her general strength was recruited.

The following table will shew the progress of the complaint.

		- D	INK.	DIA	BETIC FLUID.
181	2.	Quarts:		2ua	rts.
Feb.	6.	3		4	
	-7.	3		4	
1	8.	3 1		. 4	E 01 1
	9.	1: 4 .C		6, a	nd sweat
	10.	3 9 .		4	.0.2
	11.	3		4, 1	pint =
	12.	2, 1 pint		4	202
	13.	1 .		4	2 465
	15.			5	2 42
	16.	3		5	2=
	17.			4	
	19.	2		3, 1	pint ·
	20.	2		3, 1	pint
	23.	- 2	,	4	· .
	24.			5	
			E 2		Feb. 25.

	Drink.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
Feb. 25.	2	4, 1 pint
26.	2	4
27.	2	5
28.	2	3, 1 pint
29.	2	3, 1 pint
March 1.	2, 1 pint	3, 1 pint
2.	1, 1 pint	2
6.	3	4, 1 pint
7.	3	5, 1 pint
8.	2, I pint	6, 1 pint
9.	2	4, I pint
10.	2, 1 pint	5
12.	2	3, 1 pint
13.	3	5, I pint
	3, 1 pint	5, 1 pint
15.	3	6. I pint
16.		6, 1 pint
	2, 1 pint	6
- 18.	2	7
19.		5, 1 pint
	2, 1 pint	5
21.		4, I pint
	2, 1 pint	4. I pint
23.		4
	2, 1 pint	3
25.		4, 1 pint
20.	2, 1 pint 2, 1 pint	6
28.		5, I pint
29.	2	4, 1 pint 4, 1 pint
30.	2	5, 1 pint
		March 31.
		mach 31.

	DRINK.	DIABETIC FLUID.
. 1812.	Quarts.	Quarts.
March 31.	2, 1 pint	4, 1 pint
April 1.	2, 1 pint	5, 1 pint
2.	2	5
3.	2, 1 pint	,5
4.	2	5
5.	2	5
6.	2, 1 pint	6
7.	2	5

Here my information ended, respecting this patient. I understand, that she was attacked by ileus, and died almost as soon as the surgeon could arrive to her assistance,

CASE VI.

George Slater, about forty years of age, was admitted, July 13th, 1812. His urine tasted sweet, and he passed about four quarts in twenty-four hours. He was put on animal diet, lime-water, and the boluses composed of Cinchona, Uva Ursi, and Opium. The existence of saccharine matter, in the urine, in

the usual proportions, was ascertained by evaporation.

The following table will shew the progress of the complaint.

	DRINK.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
July 14.	3, 1 pint	4
15.	3	3, 1 pint
16.	3	3,° 1 pint
17.	3	3, 1 pint
18.	3, 1 pint	3, 1 pint
19.	3	3
20.	3	3
21.	3	3, 1 pint
22.	2, 1 pint	3
23.	2, 1 pint	3
24.	2	2, 1 pint
25.	2, 1 pint	3
26.	2, 1 pint	2, 1 pint
27.	21,	2, 1 pint
. 21 28.	2 1 1 1	2, 1 pint .
29.	2	2, 1 pint
30.	2, 1 pint	3
.011/031.113	2, 1 pint, 4 oz.	3" " " " " " " " " " " " " " " " " " "
Aug. 1.	2 5 1 1 1 1 1 1 1	2, 1 pint and half
anoderic	2	2, 1 pint
3.	2	2, 1 pint
90.190-4.0	1, 1 pint, 4 oz.	2 1 ,
mi e. 5.1.	1, 1 pint (191), 17	1, 1 pint and half
p.do	5 5	Aug. 6.

		DRINK.	DIABETIC FLUID.
181	2.	Quarts.	Quarts.
Aug.	6.	2	2
	. 7.	1, 1 pint, 4 oz.	1, 1 pint and half
	8.	2	2
	9.	2	2, and half pint
	10.	1, 1 pint	2, 1 pint and half
	11.	I, I pint	2, 1 pint and half
	12.	1, 1 pint and half	2, 1 pint and half
	13.	1, 1 pint and half	2
	14.	1, 1 pint and half	2, 1 pint and half
	15.	2	2, 1 pint and half
	16.	1, 1 pint and half	2, 1 pint and half
	17.	2	2
	18.	1, 1 pint and half	2, 1 pint and half
	19.	2	2, 1 pint and half
-	20.	2	2
	21.	2	2, 1 pint and half
	22.	2	2, 1 pint
	23.	2	2, 1 pint and half
	24.	2	2, 1 pint and half
	25.	1, I pint and half	1, and half pint
	26.	1, 1 pint	1, and half pint
	27.	I, 1 pint	1, and half pint
1.	28.	1, 1 pint	1, and half pint
		\	

His urine was now quite of the natural flavour, and under the natural quantity; upon examination it yielded no saccharine matter, and his general health was completely re-established. He was therefore discharged cured.

CASE VII.

Robert Burgess, about forty-four years of age, admitted June 22nd, 1812, had been ill of Diabetes about four months. His urine contained, by experiment, nearly half an ounce of saccharine matter, to eight ounces of fluid. He was emaciated, sallow-complexioned, and complained of internal flutterings, and sometimes of pain. His tongue was foul.

He was ordered the usual course of Cinchona, Uva Ursi and Opium, with lime-water, and animal diet. The quantity of fluid passed by the kidneys was upwards of three quarts in twenty-four hours.

The following table exhibits the course of the disorder.

OF DIABETES.

	OF DIABE	ILD: (J
	DRINK.	DIABETIC FLUID.
1812.	Quarts. "	Quarts.
June 25.	1, and half pint	3.
26.	1, and half pint	3, 1 pint .
27.	1, and half pint	3, and half pint
28.	1, and half pint	3, and half pint
29.	1, and half pint	3, and half pint
30.	1, and half pint	- 3 .
July 1.	1, 1 pint	2, I pint and half
2:	I, I pint	3, and half pint
3.	1, 1 pint	3
4.	1, and half pint	and half pint
5.	1, 1 pint	2,-1 pint and half
6.	1, 1 pint	2, 1 pint and half
7;	1, 1 pint	3 '
8.	1, 1 pint	3
10.	I, I pint	2, 1 pint and half
11.	1, 1 pint	3, and half pint
12.	1, 1 pint	2, 1 pint and half
13.	1, I pint	. 3 × a.
14.	2	3, and half pint
15.	I, I pint	3, and half pint
16.	2	3, and half pint
17.	2	3 3
18.	2	3
19.	2	2, 1 pint and half
20.	2	3
21.	2	2, I pint
22.	2 .	3
23.	2	3, 1 pint and half
24.	2	3, 1 pint and half
25.	2	3
26.	2	2, 1 pint and half
1 3		July 27.

	DRINK.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
	2	2, 1 pint
	2	3
	2	3
30.	2	2, 1 pint
31	2	2, 1 pint
Aug. 1.	2, I pint	2, 1 pint and half
2.	2, 1 pint	2, 1 pint
3.	2	2, 1 pint -
4.	2 .	2
- 5.	2 .	2, 1 pint
6.	2	2
	2, 1 pint	2, 1 pint
8.	2	2, 1 pint
9.	2, 1 pint	2
10.	2	2
- 11.	2	2
12.	2	2, and half pint
13.	2	2
14.	2	2
15.		2, and half pint
16.	2	2
17.	2	2
18.	2	2
19.	2	1, 1 pint
20.	2	2
21.	2	2 ' -
22.	2	1, 1 pint and half
23.	21	2
24.	2	2
25.	2	2
26.	2	2

Aug. 27.

	DRINK.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
Aug. 27.	2	2 - 11
28.	2	2, and half pint
29.	2	2
30.	2	2
31.	2	2, and half pint
Sep. 1.	2	2
2.	2	2
3.	2	2
4.	2	2
5,	2	1, 1 pint and half
6.	2	1, 1 pint and half

His urine was now natural, both in quality and quantity; his health and strength were restored; he was therefore discharged cured, Sep. 7, 1812.

CASE VIII.

Jonathan Whitaker, fifty years of age, was admitted, Sep. 1st, 1812. He made an unusual quantity of urine, especially in the night, was weak, emaciated, and had a foul tongue. His urine was not at all sweet to the taste; and on being evaporated, was not found to contain saccharine

saccharine matter. This may be regarded, therefore, as a case of simple Diabetes. The quantity of urine discharged in twenty-four hours was nearly five quarts.

He was ordered Cinchona, Uva Ursi and Opium, in the usual form, and was directed to live on animal food.

I subjoin the table of his complaint. It was begun, previous to his admission.

		DRINK.	DIABETIC FLUID.
1812.		Quarts.	Quarts.
Aug. 2	6.	1, 1 pint	1, 1 pint and half
2	7.	1. 1 pint and half	2
2	28.	1, 1 pint	2 '
2	29.	2 .	2, 1 pint and half
3	0.	2, and half pint	3
Sep.	1.	2, 1 pint	3, and half pint
	2.	2, and half pint	3
	3.	2, 1 pint	4, 1 pint
	4.	2	4, and half pint
	5.	2, and half pint	4 10 20
	6.	2, and half pint	4, 1 pint
	~	O and half mint	

		DRINK.	DIABETIC FLUID.
181	2. *	Quarts.	Quarts.
Sep.	9.	2, and half pint	3, 1 pint and half
	10.	2	3
	11.	2, and half pint	3, 1 pint
	12.	2, 1 pint	4
	13.	2	3, 1 pint
	14.	2, and half pint	4
	15.	2	3
	16.	2, and half pint	3
	17.	2, and half pint	3, and half pint
	18.	2	3, 1 pint
	19.	2, 1 pint	3, and half pint
	20.	2	3
	21.	2, and half pint	3, 1 pint and half
	22.	2	3, 1 pint
	23.	2	3.
	24.	1, 1 pint and half	2, 1 pint
	25.	1, 1 pint and half	2, 1 pint and half
	26.	1, 1 pint	2, 1 pint
	27.	1, 1 pint	2, 1 pint
	28.	1, 1 pint and half	2, 1 pint and half
	29.	1, 1 pint	2, and half pint
	30.	1, 1 pint	2, and half pint
Oct	. 1.	1, 1 pint and half	2, 1 pint
	2.	1, 1 pint and half	2
	3.	1, 1 pint	2, and half pint
	4.	1, 1 pint	2, and half pint

He now declared that he felt himself perfectly restored to health. He was therefore discharged cured, Oct. 5th.

CASE IX.

CASE IX.

Thomas Pollitt had been ill of Diabetes for four months, when he was admitted an in-patient, Sept. 11th, 1812. His urine was found, by experiment, to contain a considerable proportion of saccharine matter. He passed upwards of four quarts of water, in twenty-four hours, at the time of his admission. He was directed the Cinchona, Uva Ursi, Lime-water and Opium, in the manner already described, and was restricted to animal diet. The following table will shew the progress of his cure, which was not accompanied with any peculiar circumstances.

		DRINK.	DIABETIC FLUID.
181	2.	Quarts.	Quarts.
Sep.	11.	4 - 1	4, 1 pint
	12.		3, 1 pint
	13.		4
	14.		3
	15.	2	3 .
5	16.	2, and half pint	3, 1 pint
	17.	2, 1 pint	3
	18.	3	3, 1 pint
	19.	3, 1 pint '	4, and half pint
			Sep. 20.

181	2.	DRINK.	DIABETIC FLUID. Quarts.
Sep.	20.	3	3, 1 pint and half
	21.	3	3, 1 pint and half
	22.	3, 1 pint	4, and half pint
	23.	3	4, 1 pint
	24.	3, 1 pint	3
	25.	3	4
٠. ,	26.	: 4	4, 1 pint
~	27.	4, 1 pint	4, 1 pint
	28.	4	4, 1 pint
	29.	3, 1 pint	4
	30.	4	5
	31.	2, 1 pint	2, 1 pint and half
Oct.	1.	3	3, and half pint
	2.	2, 1 pint and half	3
	3.	2, 1 pint	3'
	4.	2, 1 pint	2, 1 pint and half
	5.	2, and half pint	2, 1 pint
	6.	2, 1 pint	2, 1 pint and half
	7.	2, 1 pint	3
	-8.	2, 1 pint and half	3
	9.	2, 1 pint	2, 1 pint and half
	10.	3	3, 1 pint
	11.	2, 1 pint	3
	12.	2, 1 pint and half	3
	13.	2, 1 pint	2, 1 pint and half
	14.	2, 1 pint and half	3
	15.	2, 1 pint	2, 1 pint and half
	16.	3	3, and half pint
	17.	2, 1 pint	2, 1 pint and half
		11 1 1	

He was discharged, perfectly cured, Oct. 17th, 1812.

*

Robert Burgess, re-admitted Dec. 22d, 1812, was passing four quarts of water in twenty-four hours. The existence of saccharine matter in his urine was ascertained, by experiment. He was ordered, Uva Ursi, with Cinchona, and Opium, and was confined to animal diet. He recovered rapidly under this treatment, and went out, apparently in perfect health.

	Drink.	DIABETIC FLUID.
1812.	Quarts.	Quarts.
Dec. 22.	2	4
23.	2	3, and half pint
24.	1, 1 pint	3, 1 pint
25.	2	3
26.	2	- 3
27.	2	3
28.	2	3, 1 pint
29.	2	3, 1 pint
. 30.	2	3, 1 pint
31.	2	3, 1 pint
1813.		
Jan. 1.	2	3, 1 pint
2.	2	3, and half pint
		Ian. 3,

		DRINK.	DIABETIC FLUID.
1813.	2	uarts.	Quarts.
Jan. 3	. 1,	1 pint	3
4		•,	. 3
. 5			3
6		and half pint	3, 1 pint
7	. 2	* * :	` 3
8	,	and half pint	3, and half pint
9		and half pint	3, 1 pint
10	. 1,	1 pint and half	3
11	. 1,	1 pint and half	3
12	. 2		3
13.	. 2,	and half pint	3, 1 pint
14		and half pint	3, 1 pint
15	. 2,	and half pint	3, 1 pint
16	. 2,	and half pint	3, 1 pint
17	. 2		3 .
. 18	. 1,	1 pint and half	3
19	. 2		2, 1 pint
20	. 2		2, 1 pint and half
21.	. 2		3
22	. 2		3
23	. 2,	and half pint	3
24	. 1,	1 pint and half	2, 1 pint and half
25	. 1,	1 pint and half	2, and half pint
26	. 2		. 3
27	. 2,	and half pint	3
28	. 2		2, 1 pint and half
29.	. 2		2, 1 pint
30	. 2,	and half pint	3
31.	. 1,	I pint and half	2, and half pint
Feb. 1.	2		2, 1 pint and half
2.	2	7 -	2, 1 pint and half
Vol	IV.	F	Feb. 3.

		DRINK.	DIABETIC FLUID.
1813.		Quarts.	Quarts.
Feb.	3.	2	2, 1 pint
	4.	2	2, 1 pint
	5.	2, and half pint	2, 1 pint
	6.	2	2, and half pint
	7.	2	2, and half pint
	8.	2	2, 1 pint
	9.	2	2, 1 pint
	10.	2	2, 1 pint
	11.	2 .	2, 1 pint
	12.	2	2, 1 pint
	13.	2	2
	14.	2	2

CASE X.

Joseph Tomlinson was admitted, March 29th, 1813. He had long suffered from symptoms of Diabetes, and was passing a very considerable quantity of the fluid, containing saccharine matter. His father, I understood, had died of the same disease.

Tomlinson was put on the usual course of tonics, opium, and animal food. After remaining a short time in the hospital, he sunk rapidly, and died with every symptom of exhaustion.

On opening the body, the kidneys were found enlarged and flaccid, but not otherwise diseased.

Some marks of inflammation appeared in the pleura.

I had an opportunity, lately, of seeing Winterbottom, whose case was detailed in the second edition of the first volume of this work; and he informed me that he had continued free from Diabetes, from the time of his leaving the hospital, then four years.

Upon reviewing the number of Diabetic cases, which it has fallen to my lot to conduct, during the last twenty years. I have the satisfaction of perceiving, that the mode of treatment which I have been led to adopt has been attended with considerable success. Out of thir-

teen cases, of which I have preserved minutes, ten have been cured, and two much relieved. This is an encouraging result of practice in a disease, which, till within a few years, was reckoned incurable.*

Several other cases have come under my notice, some of which have terminated favourably; but as patients of this class are often irregular in calling on their physician, and are careless in attending to a disagreeable regimen, when they begin to recover, I cannot give an accurate account of them.

Sufficient evidence, I trust, has been produced, of the efficacy of tonic medicines, gentle opiates, and animal diet, in this disease; in this respect, the essential object of my researches has been attained.

^{*} From whatever cause it may proceed, it is remarkable, that I have seen many more cases of Diabetes, within the last twelve months, than in the whole of my preceding practice.

But in attending to the morbid appearances, and the connexion of symptoms in Diabetes, while I felt myself dissatisfied with the opinions which have hitherto prevailed, respecting the theory of the disease, I could not help forming, insensibly, an hypothesis of my own, which I shall now submit to the candid consideration of my readers.

My first impressions respecting the treatment and nature of Diabetes were derived chiefly from Dr. Sydenham. That great physician had seen few cases of the disorder, but his sagacity led him to consider it as a disease of debility. On this idea I began the tonic practice. When my opportunities of observation became more frequent, I referred to the older medical writers, with little advantage.

The ancients knew little of Diabetes:
Hippocrates has not mentioned it, and
Galen saw only two cases. Aretæus has
F 3 indeed

indeed described it in his usual masterly style. The leading appearance of the disease, rappin wait utrition is upon in the first and members into urine,' did not escape his notice. But the change in the quality of the fluid, passing through the kidneys and bladder, was unknown to him. He supposed it to consist of the drink taken in, and discharged unchanged.

Mercatus has given an accurate history of the disease in every respect, excepting the peculiar alteration in the diabetic fluid, which he mentions as the potus immutatus.

Sennertus fell into the same error; though his account of the symptoms is otherwise just.

Dr. Willis was the first writer who observed the peculiar appearance of the diabetic fluid; and who remarked that it tasted tasted as if sugar or honey had been dissolved in it. He imputed the disease to a dissolved state of the blood, and his opinion seems to have prevailed, till the time of Dr. Cullen.

The theory which supposes Diabetes to depend on a formation of saccharine matter, in the stomach, in place of chyle, though published by Dr. Dobson, appears to have been originally taught by Dr. Cullen, in his lectures. It was subsequently supported by the fanciful genius of Darwin, but derived its principal strength from the observations of Dr. Rollo.

One of the most remarkable phænomena of the disease, the rapid transmission of fluids taken into the stomach, through the kidneys, had attracted the attention of Sennertus and Bartholin, who endeavoured to account for it without success.

This symptom has indeed puzzled all late observers, who have occupied themselves with its consideration, as earnestly as the old navigators searched for the supposed north-west passage. Sennertus suspected some communication between the liver and emulgent vessels. Bartholin referred the cause, vaguely, to the then newly-discovered lacteals.* Dr. Darwin's conjecture of a retrograde motion in the lymphatics is so incompatible with their structure, that it requires no confutation.

We find nothing useful in the writings of the ancients respecting the cure of this disease. Aretæus recommends the use of the same remedies as those given in dropsy; and as the chapter on the cure of dropsy is lost, we remain ignorant of his method.

^{*} Bonet. Anatom. Practic. p. 1267. De viis per quas potus nequaquam immutatus in Diabete excernitur.

Mercatus recommends the most nourishing kind of animal food, and mucilaginous substances, for the patients' regimen.

Dr. Willis, with a similar regimen, joined the use of lime-water.

Dr. Rollo's plan of animal diet, in this disease, has however all the merit of a discovery; and he has done much service, by directing the attention of the faculty in a particular manner to this complaint.

After revolving in my mind the morbid appearances which I had witnessed, I could not find reason to believe that the saccharine matter originated in the stomach. I have, at this time, two diabetic patients under my care,* whose complexions are ruddy and distinct, and who, though reduced in size, have too

^{*} Mr. A-n, and Geo. Slater.

healthy an appearance to admit of Dr. Rollo's supposition of depraved action in the stomach. Yet these persons have been ascertained, by experiment, to pass a large proportion of saccharine matter with their urine. And in Fletcher's case, the patient was cured, though he was passing an equal proportion of saccharine matter, while the diabetic fluid was lessened in quantity.

If we reckon the proportion of saccharine matter to the quantity of diabetic fluid, only as an ounce to a pint, in many cases, twelve or fourteen ounces of a substance resembling molasses must, on this supposition, be formed in the stomach every twenty-four hours. It would then be possible to render it obvious to the senses, by evacuating the contents of the stomach, at a proper time after eating. Dr. Cullen's supposition did not go to this extent. He only asserted some defect of assimilation; but as he assumed saccharine matter to be

the basis of nutritious substances,* he would probably have inclined to an opinion similar to that of Dr. Rollo.

It is sufficient to object to this opinion, that the proof of the existence of saccharine matter in the stomach and bowels is totally wanting.

I have seen nearly a complete suspension of assimilation in the stomach and bowels, without any diabetic symptom whatever.

I had occasion, several years ago, to visit a gentleman, who, in consequence of extraordinary exertions in business, which required constant walking, had lost the power of digestion. His food, when solid or fibrous, both of the animal and vegetable kind, was evacuated by the anus unchanged. Much debility, and occasional spasms in the stomach, were

^{*} In his Materia Medica.

the principal symptoms of the complaint, which was readily removed, by allowing proper time for rest, after dinner, and by a temporary change of occupations.

Some of the older writers have fancied that there was a resemblance between Lientery and Diabetes, but without justice. In Lientery, the chyle is hurried through the intestines, without being taken up by the absorbent vessels, but there is no increase in the quantity of the urine. In Diabetes, on the contrary, the contents of the stomach and bowels appear, as far as they can be examined, to be in a natural state, while a morbid secretion is passing through the kidneys and bladder.

That the functions of the chylo-poetic viscera are much disturbed, in Diabetes, cannot be doubted by any person who has seen the disease. The foul tongue, covered with a thick, dry, yellow crust, or divided by ulcerated fis-

sures; and the frequent disorders in the bowels, the devouring thirst, and sensation of internal heat and fluttering, indicate great disorder in the stomach and intestines. These symptoms, however, may be accounted for upon other principles, which I shall explain hereafter.

Much error seems to have been caused, in reasoning on this disease, from continuing the name of urine to the fluid discharged by the urinary passages, while the evidence of the senses, and chemical analysis, prove that it is a secretion totally different from the natural contents of the kidneys and bladder. It appears, indeed, from an interesting observation of, Dr. Henry,* that, even in the height of Diabetes, the functions of the kidneys are not totally suspended, and that they continue to secrete a small portion of urine; but I conceive that

^{*} See his remarks on the diabetic fluid of two of my patients. Med. Hist, and Reflect, vol. i. p. 144, 2nd edit.

the greater quantity of fluid passing off by them can no more be said to be secreted by those organs, than the bile which they often transmit in large quantities, during obstructions to the passage of bile into the intestines.

Dr. Henry's observation serves to explain a fact, which several of my patients have mentioned to me, that the taste of the diabetic fluid discharged by them varied at different times of the day; that in the morning it had more of a urinous flavour, and became sweeter in the afternoon, and during the night.

It is no uncommon occurrence in diseases, to find large quantities of natural or morbid secretions passing through the kidneys, or deposited in different cavities of the body. Besides the familiar instance of bile, carried off, in its proper form, by the urinary passages, in jaundice, or deposited under the skin, we know that urine, in ischuria, is carried ried from the kidneys and bladder, and deposited under the membranes of the brain; and that pus, and even the calcareous matter of the bones, are in like manner removed from one part of the body to another, without preventing the organs through which they pass from exercising their proper functions, or at least, without disturbing them in any remarkable degree. To this operation, which is well known by the name of Metastasis, I am inclined to refer the deposition of the diabetic fluid in the kidneys.

In what specific manner the process of Metastasis is performed, we cannot, in the present state of knowledge, explain. The difficulty is not greater in the case of Diabetes, than in some other diseases. But there is evidently, in Diabetes, a defect in the supply of nutritious matter, for the repair of the parts absorbed, and in consequence, an encreased action of the absorbent vessels, which

which go on decomposing the solids, till the utmost degree of emaciation takes place, and till ulcerations in the tongue and gums, and sometimes even of the kidneys themselves, take place. I was formerly induced to believe, that Diabetes was produced by some local disease in the kidneys; but my increased opportunities of observation have led me to change that opinion. The external and internal ulcerations which I have seen in the kidneys of patients who have died of Diabetes may well be referred to the extreme irritation which they undergo, in transmitting such unusual quantities of a foreign body.

The ulcerations of the kidneys, which take place in aged persons, have not been observed to produce Diabetes.

Thus far, then, I agree with the opinion of Dr. Cullen, that the supply of nourishment for the solid parts is interrupted. Having shewed, that the defect

of assimilation does not appear to take place in the first passages, it remains to be enquired, where this interruption is produced. It cannot happen in the lungs, because saccharine matter does not exist in any large quantity in the blood of diabetic patients. Whatever alterations may have been observed, or fancied, in the blood drawn from them, they bear no kind of proportion to the quantity of morbid secretion, passing off by the kidneys. Indeed it is probable that these changes are such only as existin all cases of chronic debility, when blood-letting is not usually resorted to, and where the appearance of the blood is consequently unknown.

The animal body is in a constant state of change and renewal, the particles removed by the absorbents being replaced by the action of the extreme vessels. It is the function of these minute agents to convert their contained fluid into muscular fibre, ligament, nerve,

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or bone. In local diseases, they form purulent matter and granulations, for the cure of wounds, they reproduce the cutis and cuticle after accidents; unite the bones after fractures; and appear, from Dr. Hunter's preparations, to be themselves converted, upon occasion, into the parts whose formation they have prepared.

If these vessels should, from any cause, take on a morbid action, and instead of supplying nutritious matter, should form a substance which cannot be applied to renew the waste of the system, the diseased secretion must either accumulate, in the intermediate passages of the circulation, where it would produce hectic fever, (by absorption) and subsequently death, or it must be carried off by some of the emunctories, to which its stimulus must cause an increased determination of fluids. This I conceive to be precisely the case, in Diabetes.

The matter resembling molasses, which forms so large a constituent part of the diabetic fluid, having acquired a tendency towards crystallization, cannot be applied to the purposes of nutrition. Its presence in the vessels destined to that office, operates as a stimulus from a foreign body; it is therefore hurried, perhaps by the circuit of anastomosing branches, to the kidneys, exciting, by its quality, increased action in the whole system of vessels connected with those organs, and is discharged with an effort resembling that, which enables the stomach to clear itself of offensive matters contained in it.

The progress of the symptoms, in Diabetes, renders it probable, that the diseased action of the extreme vessels is sometimes only partial, and that it becomes general in fatal cases. The cases of Fletcher, Burgess and Slater prove this. The two latter patients never were so much emaciated as most of the per-

sons whom I have seen in this disease, though, at the time of their admission, their urine contained the usual proportion of saccharine matter.

That there is considerable variety in the application of nutritious particles, by the extreme vessels, might be shewn by various arguments. I shall only notice one deviation, which is not incompatible with general health. It appears in persons who become very corpulent, notwithstanding the use of exercise, and the strictest temperance in their regimen. In these cases, the extreme vessels separate an unusual quantity of animal oil. and are deficient in supplying the muscular fibres. Sometimes the accumulation of oil is carried to a degree of local disease, and by a partial increased action of the vessels, produces steatomatous tumors, in the cellular membrane, or in the cavity of the abdomen.

That the seat of morbid action lies in

the extreme vessels, is rendered farther probable, by the increased action of the exhalents, in Diabetes. The similarity of this species of effusion, to that which constitutes dropsy, when the fluid is poured into the cellular, or reflected membranes, induced some of the older writers to term Diabetes the "hydrops matulæ."

My opinion may be farther illustrated, by the similarity of process which takes place in continued fevers.

Although the theories of the proximate cause of fever, proposed by Boerhaave, Hoffman and Cullen differ in points of importance, yet all these authors agree in considering it as an obstruction of some kind, in the extreme vessels. We might therefore expect, that some of the phænomena of continued fever should resemble those of Diabetes. Accordingly, (setting aside the febrile paroxysms, occasioned by the G 3 re-action

re-action of the heart and large arteries) we perceive the tongue covered with a crust, which frequently resembles that which occurs in Diabetes: we see the emaciation of the body proceed in a similar manner; and we observe the formation of morbid substances in the urine, occasioning the sediment. If these substances are formed by the extreme vessels, the connection between their appearance in the urine, and the intervals of the febrile paroxysms, admits a ready explanation. In typhus, where the disease sometimes extends to the length of two or three months, the morbid urinary sediment becomes a continued process, like the formation of saccharine matter in Diabetes.

If we now turn our view to the nature of the remedies, which my experience has proved to be effectual in the cure of Diabetes, it will be found to agree exactly with the theory which I have ventured to propose. To correct such

a state of disease as I have supposed to exist in the extreme vessels, it would be necessary to support, for a considerable time, a tonic action on the circulating system; to keep the brain and nerves, as well as the sanguiferous vessels, under the constant, but gentle influence of Opium; and to strengthen the kidneys in particular. In point of regimen, it would be requisite to supply the stomach with those substances which would be most completely convertible into good chyle, and least likely to produce superfluous acidity in the process of digestion. It is evident that all these objects would be most readily accomplished, by the very plan of treatment which I have adopted, and which has been so completely justified by its success.

In some of the cases which I have given, the ulcerations of the tongue and gums, which so frequently attend Diabetes, did not appear, till the patients had lived for five or six weeks on animal

food alone, and put on an appearance strongly resembling scurvy. I was not inclined to consider them as diabetic symptoms, in these instances, because the patients were recovering, at the time of their appearance; and the emaciation of the body being suspended, I could not impute the ulcerations to increased action of the absorbent vessels. In the case of Miss P-n, the increased action of the exhalents was such as to produce considerable effusion into the cellular membrane, at the beginning of the complaint, and the ulcerations of the tongue or gums shewed themselves at the same time.

In the case of Burgess, the progress of recovery was distinctly marked, by the increased quantity of urea, and the diminution of saccharine matter, in the diabetic fluid,

In some other cases, this observation did not apply. The return of health

was only perceivable, from the clearing of the tongue, the restoration of natural appetite, and the improvement of the complexion; the saccharine matter still passing in equal proportions, though in smaller quantities. When Slater was passing little more than two quarts of brackish tasted urine in 24 hours, it yielded an extract precisely resembling treacle, in appearance, but not at all sweet, in the proportion of an ounce, to a pint of fluid.

I have been unable to assign any particular remote causes for the occurrence of Diabetes. Most of my patients have been industrious men, addicted to no excess of any kind; some of them living moderately well, others, especially within the last two years, faring very scantily. As far as my experience extends, Diabetes appears to have increased in frequency, of late years. Perhaps the greater use of vegetables, among the industrious poor, and

the diminished consumption of animal food among them, occasioned by its dearness, may contribute to render this disease more common. Yet in the neighbouring agricultural districts, where animal food is seldom tasted by many of the labouring poor, the disease is hardly known, and it generally occurs among persons employed in manufactures.

The flaccidity of the kidneys, which has been remarked in dissecting diabetic subjects, can only be referred, I apprehend, to the debility of the system.

If it should be objected to the opinion which I have hazarded, on this subject, that I have attributed too much to the supposed morbid state of the extreme vessels, I would beg leave to observe, that the consideration of the state of these vessels has, in my opinion, been too much overlooked, in the theory of chronic diseases. In all disorders which arise from, or are attended with organic changes

changes in the parts, especially in the viscera, the extreme vessels are the very instruments employed in producing these changes.

Whatever tends to throw new light on their pathology is therefore of essential importance. And though much of their action, both in a healthy and morbid state must for ever escape our inquiries. yet it can never be useless to keep in our view their incessant activity, which subsists even after the death of the heart and arteries,* and their wonderful power of repairing, and even forming the solid parts of the body. If a direct influence over their movements could be obtained. by any fortunate discovery, the physician might then be truly said to hold the keys of the constitution in his hands.

I have confined my observations to the Diabetes Mellitus, as I have met

^{*} It has been observed, that the hair and nails continue to grow, for some time after death.

with very few cases of the Diabetes insipidus which could be properly reckoned idiopathic.

CASE OF SCIRRHUS

OF THE

PYLORUS.

CASE OF SCIRRHUS OF THE PYLORUS.

A Gentleman, about forty-four years of age, of a florid complexion, and full, but robust habit, was attacked, in May, 1803, by the Influenza, which left his stomach debilitated, and was followed by a bilious complaint. Occasional sickness and vomiting continued to harrass him, through the months of June, July and August.

He went to Buxton in the middle of July, and staid three weeks, where he bathed, and drank a little of the water. At that time he was free from sickness for ten days together, which was the longest interval of ease he had then experienced. During his stay at Buxton, he had a copious discharge of urine, which appeared to relieve him exceedingly.

On the 22nd of August, he went to the sea-coast, and had a return of his sickness, during several days. He then discontinued his medicines (which were of the tonic kind) for three days and a half, during which his sickness left him. He recovered so rapidly, that on the fourth day, he took a long ride, and on his return, was attacked, for the first time, with pain in the right side, in the region of the pylorus, which he imputed to a sudden blast of cold wind. Much flatulency attended this seizure, and he found himself so ill, that he was obliged to go to bed, on his return to the inn. His sickness returned in the evening, and continued afterwards, with intervals

of twenty-four hours. When the sickness was over, after the discharge of the contents of the stomach, his appetite was good, and even keen; but decreased again, till the return of the nausea. Every accession of sickness and vomiting weakened his voice in a remarkable degree, and occasioned general debility.

The pain now returned frequently, which he sometimes thought was occasioned by walking, but he could bear exercise on horseback, or in the carriage, whilst his strength enabled him to use them.

He returned home in September, and I found him much altered in his appearance. His person was much emaciated; his face hollow and ghastly; and he had contracted the habit of applying his hand almost consequently to the right side.

The fits of vomiting now came on very suddenly, at irregular periods, sometimes once in two or three days, sometimes every day; often with very little previous nausea. The contents of the stomach were discharged with great violence, with a projectile force which carried them to the distance of two or three yards. From the quantity of fluid vomited, at intervals of some days, it was evident that only a small portion of the food received into the stomach passed into the intestines, and the nature of the disease became apparent.

From the obstruction to the passage of food, and the frequent recurrence of vomiting, he now became extremely costive.

As I now entertained little doubt, that a scirrhous affection of the pylorus was taking place, I endeavoured to lessen the local irritation by opiates, and to keep keep up the peristaltic motion of the lower bowels, by small doses of the Tincture Alöes, whenever it was possible to steal a passage for them through the pylorus. By these means, and by giving liquid food in small quantities at a time, a suspension of the pain and sickness was frequently procured. Milk was generally the most grateful article of food; and the patient frequently thought himself much relieved by a small glass of mild, home-brewed ale.

So much were the symptoms mitigated, by this mode of treatment, that he obtained a complete intermission of pain and sickness, during a fortnight. His spirits and strength were then recruited; his voice became nearly natural; and he took a sufficient quantity of nutriment, which was digested and passed through the intestines, in the usual manner.

But at the end of this period, the vomiting

vomiting was renewed with increased severity; his voice was again reduced, almost to a whisper; and his strength began to give way rapidly.

At length, in November, he ceased to retain the smallest quantity of food for any considerable time; his head drooped, like that of a new-born infant, and he expired, worn out with sufferings, and deprivation of nourishment.

The body was opened, after death, by my much lamented friend, the late Mr. Gibson. Every part was sound, in the thorax and abdomen, excepting the pylorus. It was scirrhous in all its substance, and would scarcely have admitted a small crow quill through its opening.

I have given the particulars of this case, because it exhibits in the clearest manner, the characteristic symptoms of this dreadful, and at present, incurable complaint.

It shews also, that the morbid action, in cases of this kind, is not uniformly progressive, but is occasionally suspended, so as to flatter the patient with hopes of recovery. This circumstance is indeed common, in most chronic diseases.

FINIS.

J. AND J. HADDOCK, WARRINGTON.